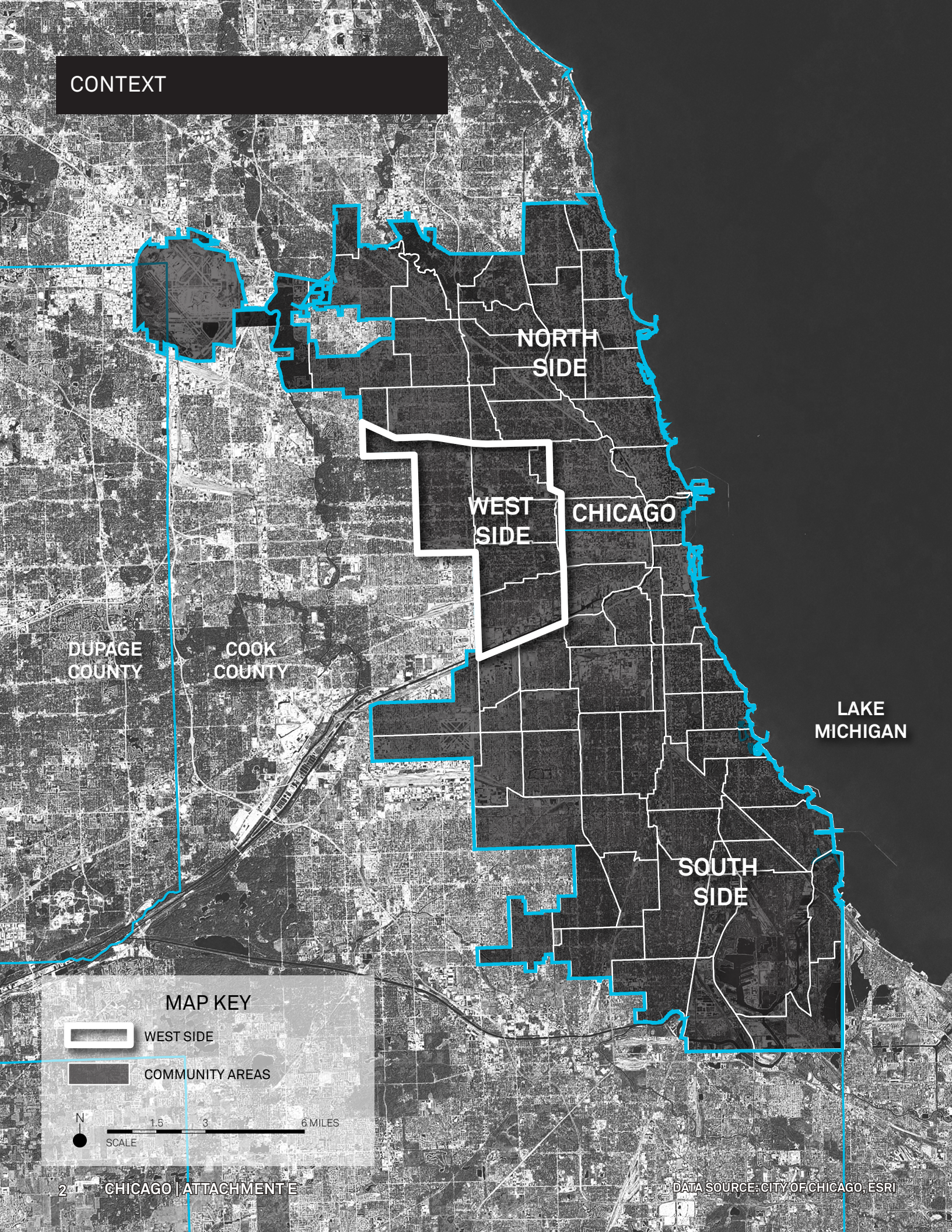




RESILIENT NEIGHBORHOODS IN CHICAGO

CONTEXT



MAP KEY



WEST SIDE



COMMUNITY AREAS



SCALE
1.5 3 6 MILES

WEST SIDE



296,325
Population



645
Acres of
Park Land



60,986
Jobs



4
Major Transit
Rail Lines



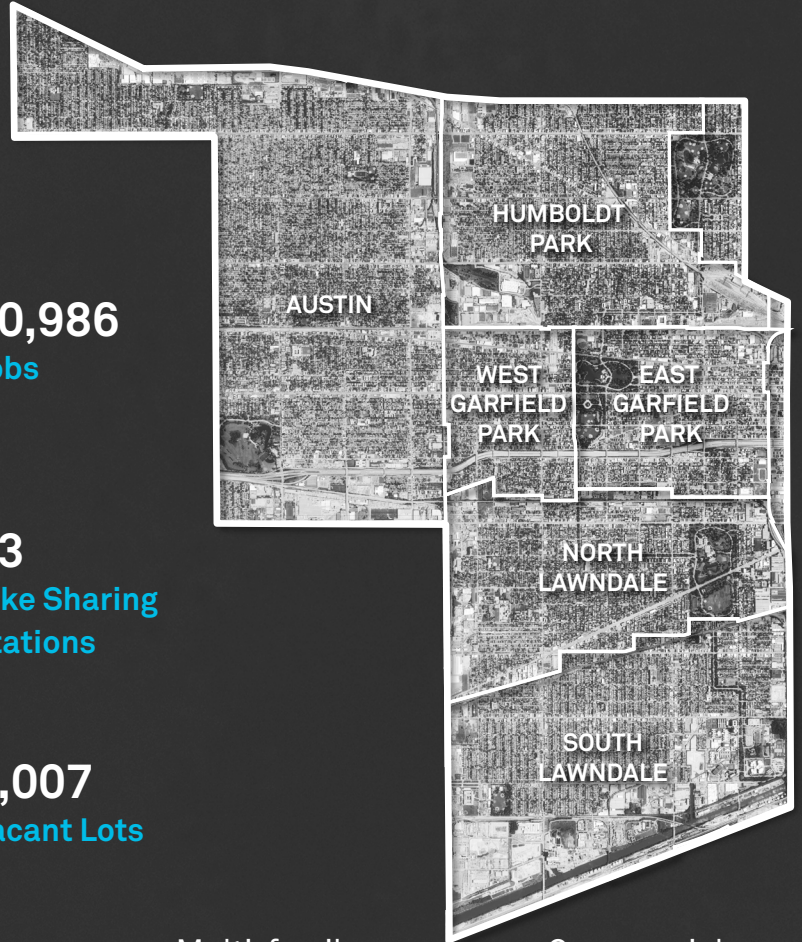
23
Bike Sharing
Stations



132
Schools



3,007
Vacant Lots



Manufacturing +
Industry



Community
Gardens



Multi-family
Housing



Commercial
Corridors



Transit



Parks



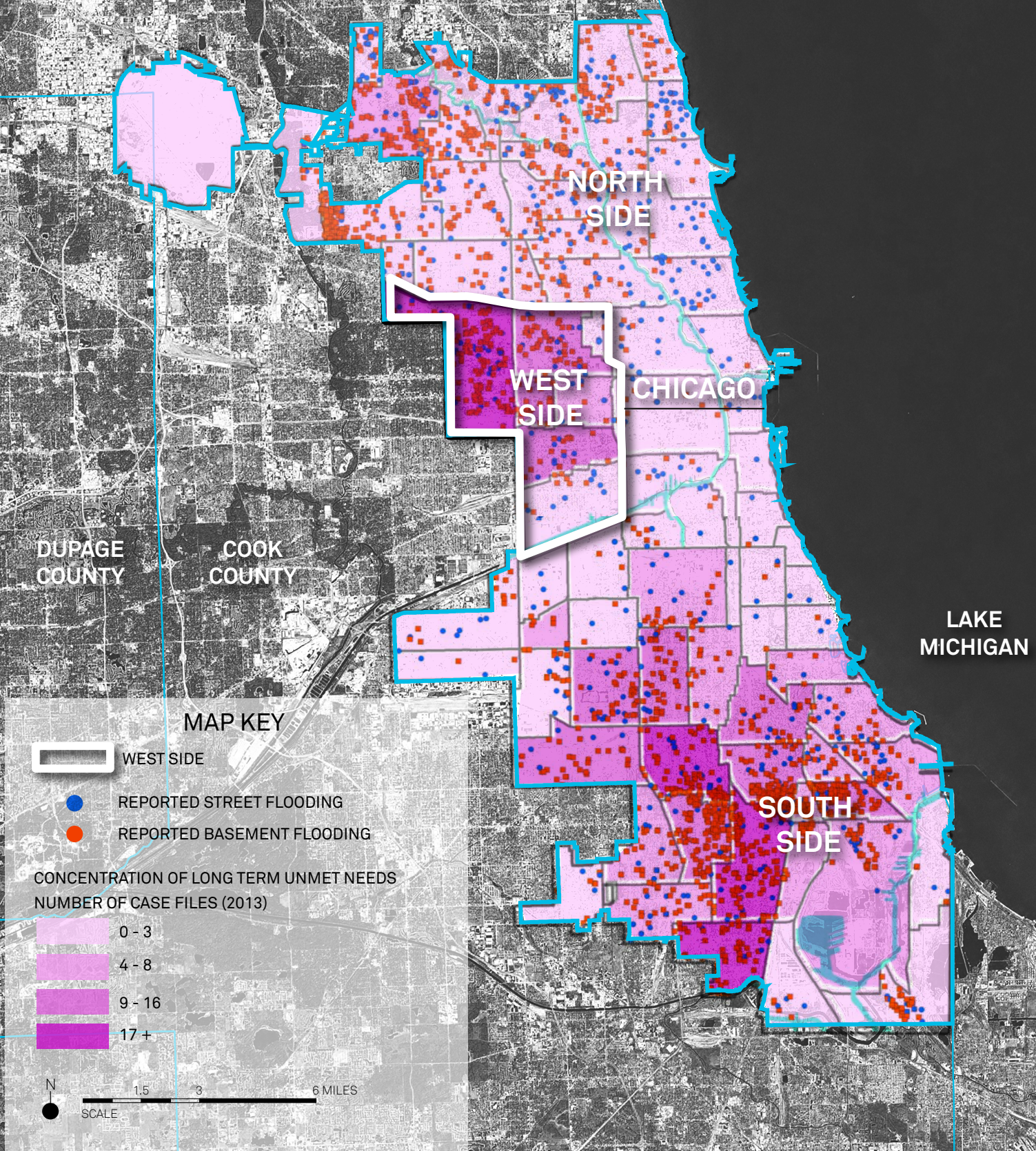
Historic
Houses



New
Schools

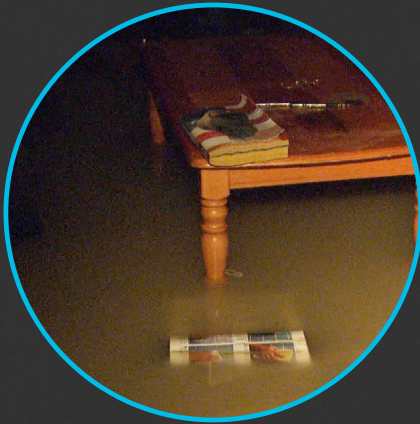


CHRONIC FLOODING

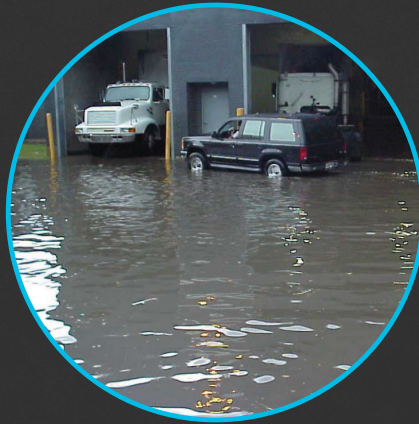


CHRONIC FLOODING

TYPES OF FLOODING



HOMES



BUSINESSES



STREETS

2013 FLOODING IMPACTS

CITY-WIDE REPORTED FLOODING
DURING APRIL 2013 SEVERE STORM:

2,500

BASEMENT FLOOD CALLS

800

STREET FLOOD CALLS

CITY-WIDE REPORTED FEMA ASSISTANCE:

DAMAGE TO
27,000
INDIVIDUALS/
HOUSEHOLDS



FEMA HOUSEHOLD
\$60M \$
ASSISTANCE

WEST SIDE

ASSISTANCE TO
6,230
INDIVIDUALS/
HOUSEHOLDS

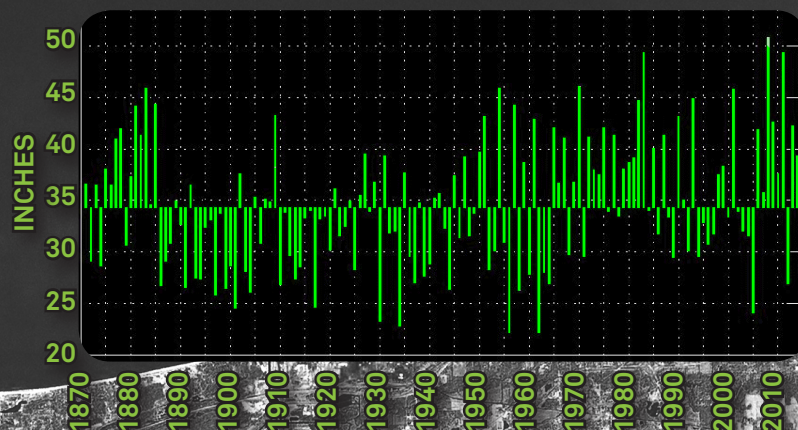


FEMA HOUSEHOLD
\$5.2M
ASSISTANCE

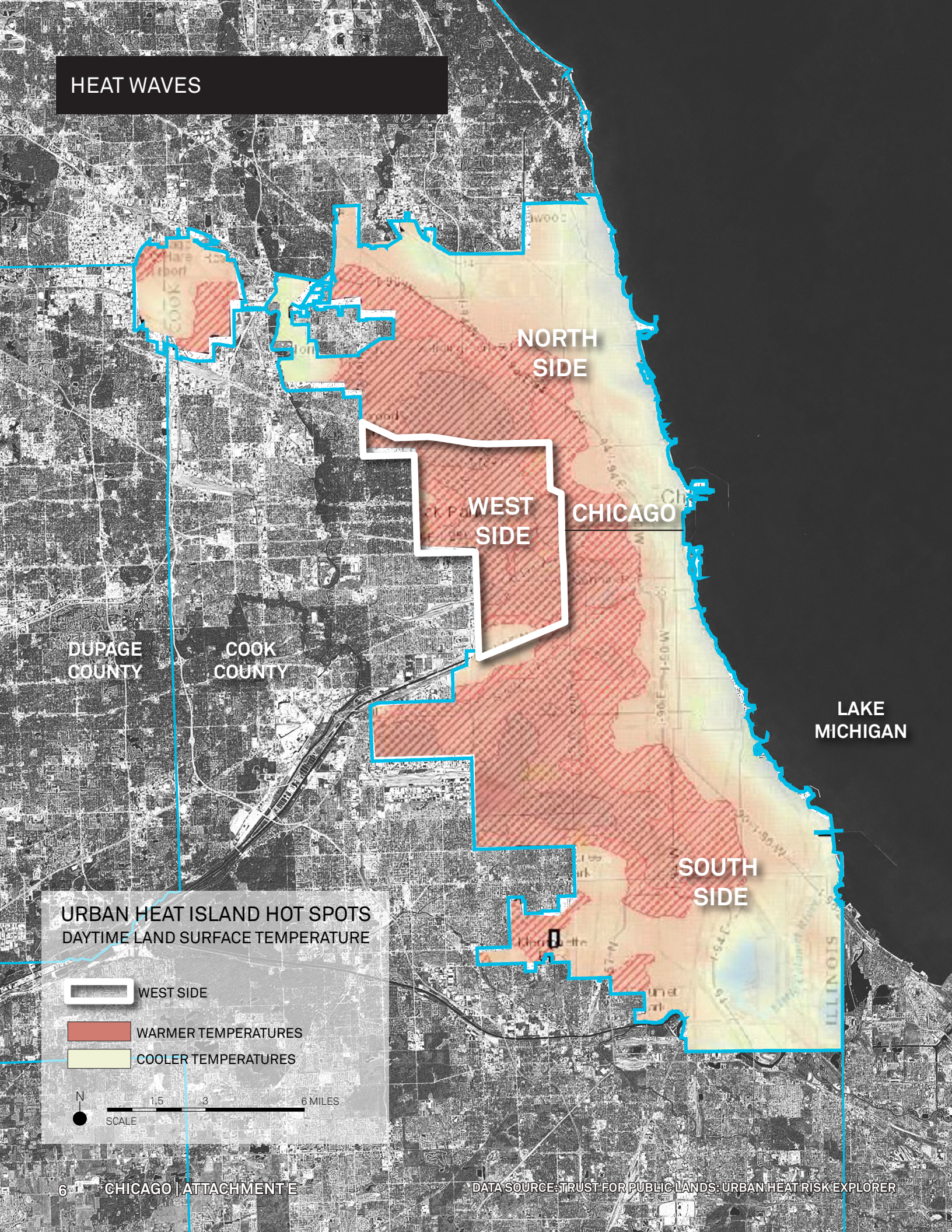


SEVERE RAIN + SNOW EVENTS

CHICAGO ANNUAL PRECIPITATION 1871 - 2014



HEAT WAVES



NORTH
SIDE

WEST
SIDE

CHICAGO

LAKE
MICHIGAN

SOUTH
SIDE

URBAN HEAT ISLAND HOT SPOTS
DAYTIME LAND SURFACE TEMPERATURE



WEST SIDE



WARMER TEMPERATURES

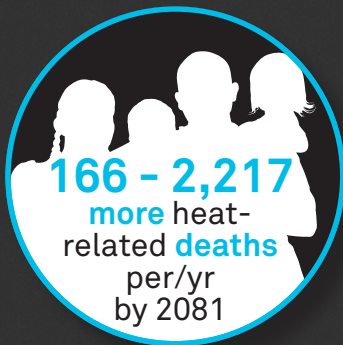


COOLER TEMPERATURES

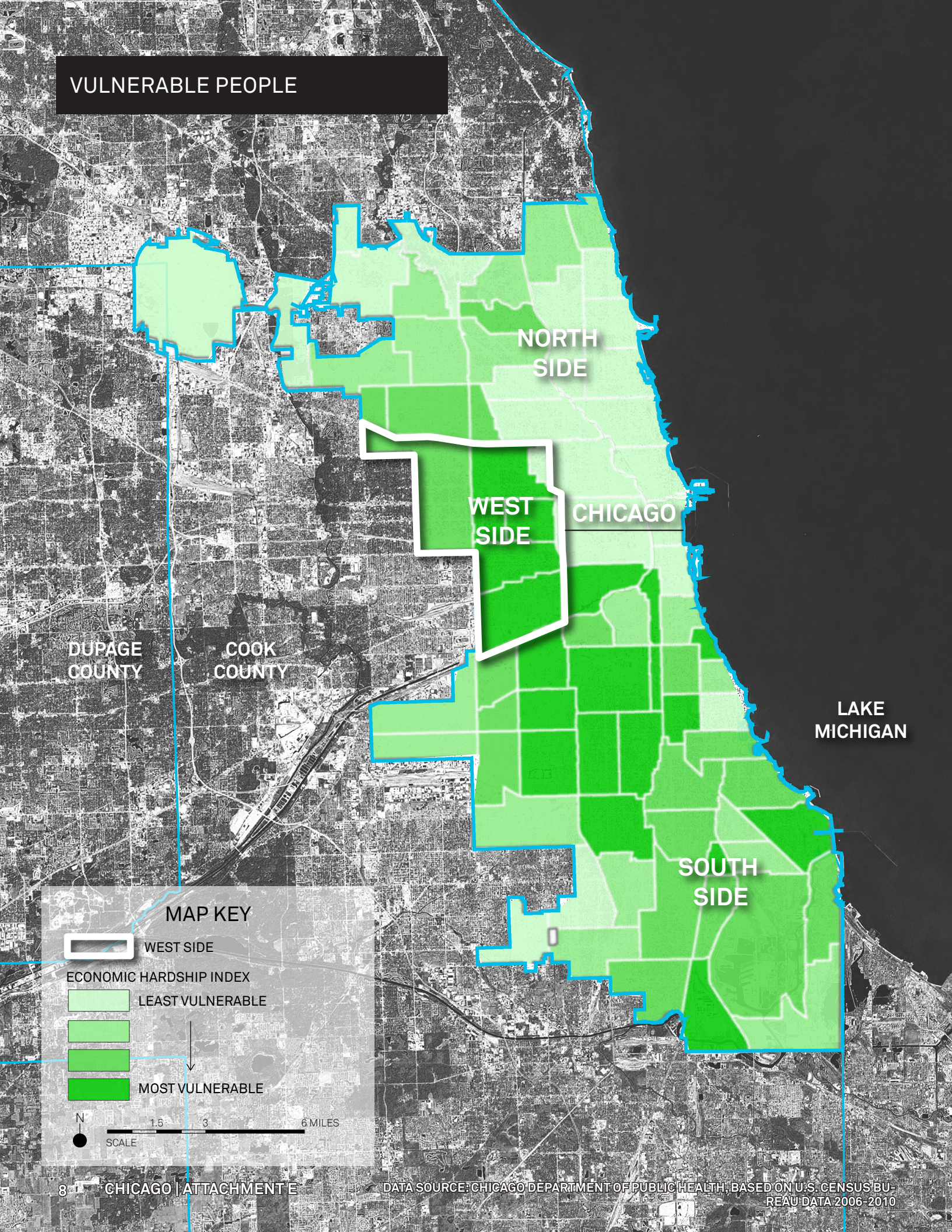


SCALE
1.5 3 6 MILES

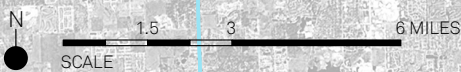
CHANGING CLIMATE IN CHICAGO



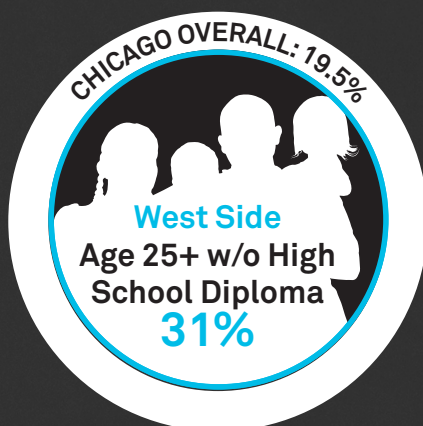
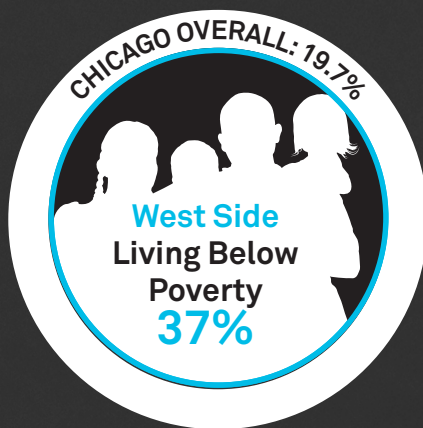
VULNERABLE PEOPLE



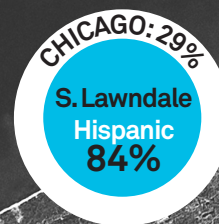
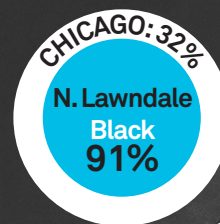
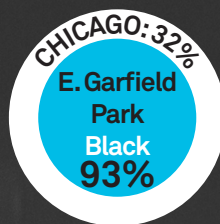
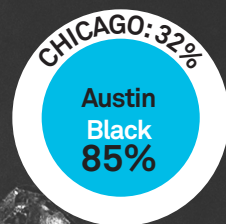
MAP KEY



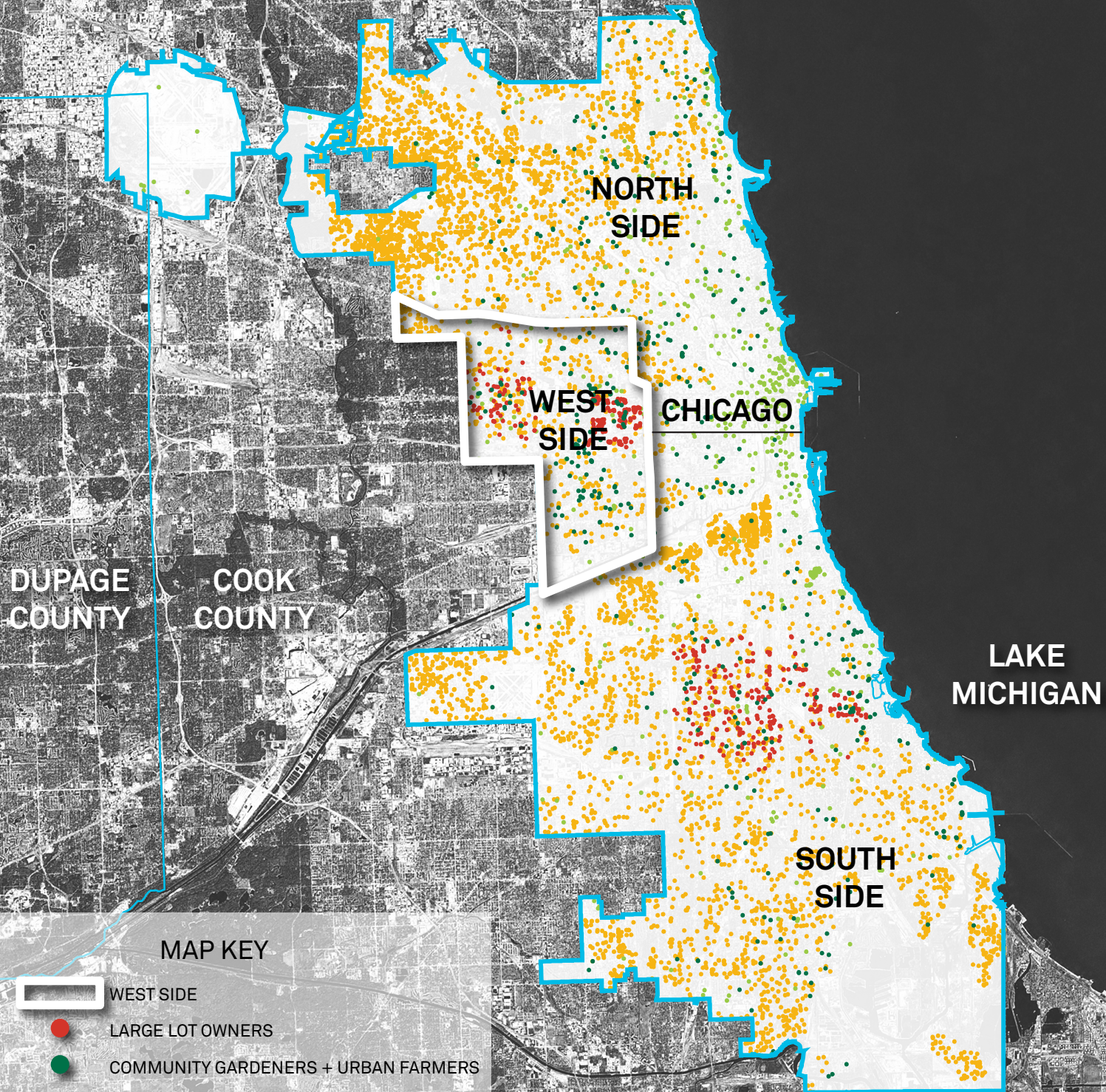
VULNERABLE PEOPLE



WEST SIDE RACIAL/ETHNIC MAJORITIES IN 2013



COMMUNITY BUILDING BLOCKS



GOVERNMENT BUILDING BLOCKS



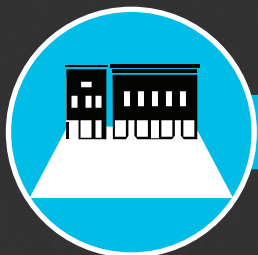
GUIDING PLANS

- Chicago Sustainable Industries Business Plan
- Sustainable Chicago
- Chicago Climate Action Plan
- Green Stormwater Infrastructure Strategy



INFRASTRUCTURE POLICY AND INVESTMENT COORDINATION

- Complete Streets Design Guidelines
- Sustainable Urban Infrastructure Guidelines and Policies
- Streets for People: Placemaking in the Public Way
- Chicago Neighborhoods Now
- Building a New Chicago



POLICIES + PROGRAMS FOR PRIVATE DEVELOPMENT

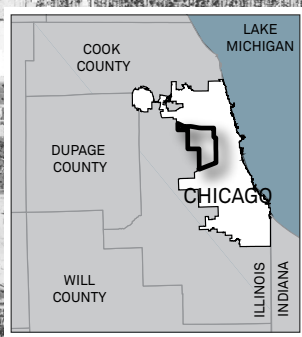
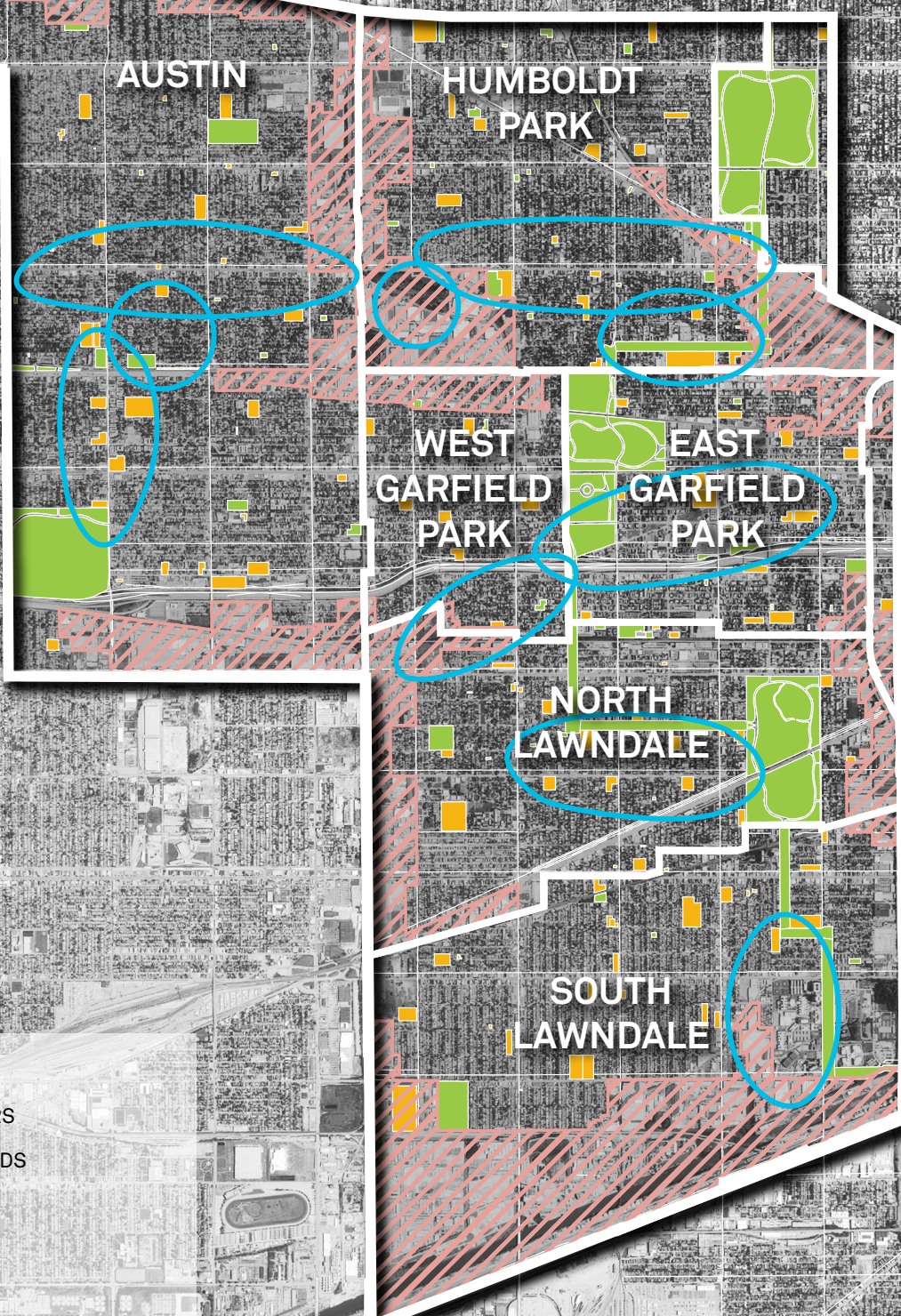
- Sustainable Development Policy
- Stormwater Management Ordinance
- Large Lot Program



PUBLIC GREEN INFRASTRUCTURE INVESTMENTS

- Green Alleys
- Space to Grow
- Urban Agriculture
- Complete Streets
- Green Roofs
- Trees
- Planted Medians

AREAS OF COMMUNITY FOCUS



MAP KEY

-  INDUSTRIAL CORRIDORS
-  PARKS AND BOULEVARDS
-  SCHOOL GROUNDS
-  COMMUNITY AREAS
-  WEST SIDE
-  COMMUNITY FOCUS AREAS

N
SCALE 0.5 1 2 MILES

EXAMPLES OF COMMUNITY FOCUS

CENTRAL AVE



CHICAGO AVE



ROOSEVELT RD



5TH AVE



16TH ST



LA VILLITA PARK



COMMUNITY ENGAGEMENT PROCESS

1. Formed Chicago Resiliency Team (CRT)

2. Identified community areas and organizations

OCT-DEC 2014

3. CRT refined approach

4. Presented resiliency issues at community meetings and surveyed businesses

JAN-MAR 2015

5. 1 on 1 meetings with community and business leaders to ID land use priorities

6. CRT adds partners and outlines potential project areas

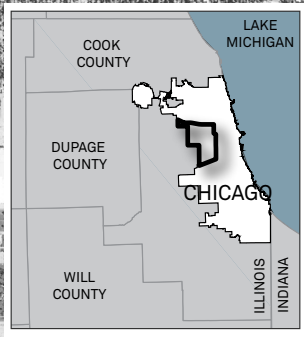
MAR-JUN 2015

7. Held community workshops to discuss results and intervention options

8. Engaged consultants and used modeling to refine project areas

JULY-OCT 2015

INTEGRATING LAND USE + STORMWATER PLANNING

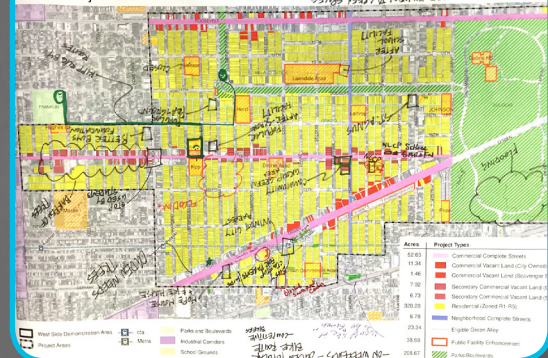
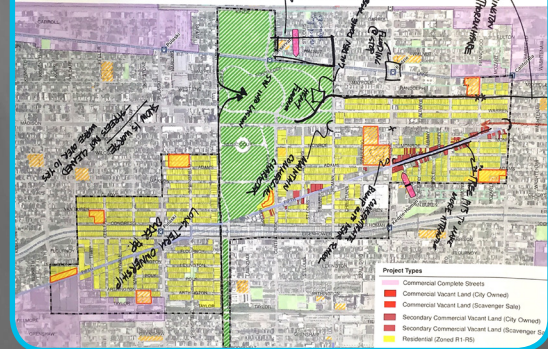
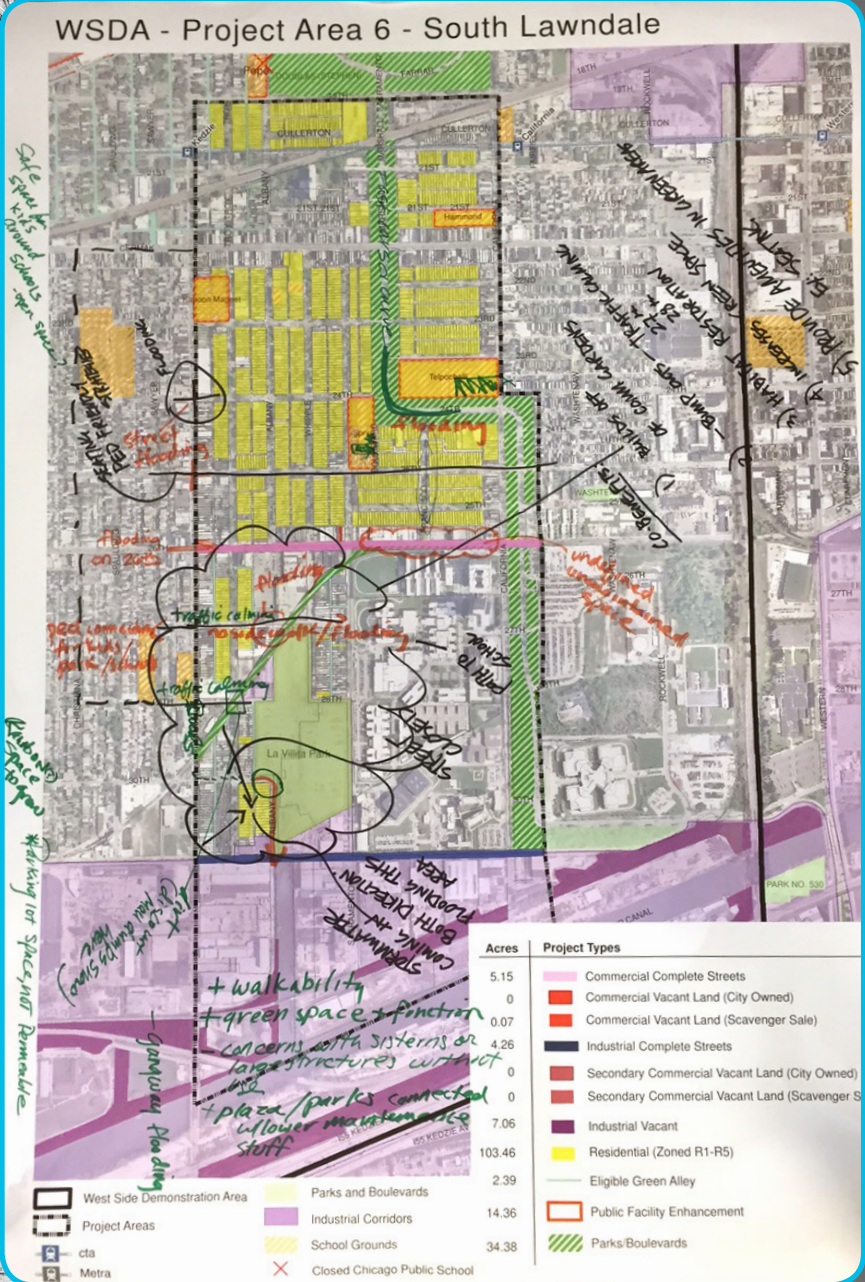


MAP KEY

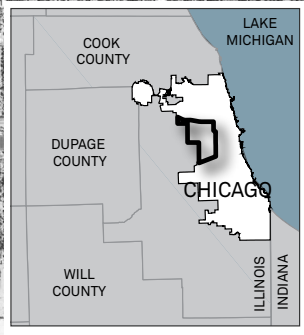
- INDUSTRIAL CORRIDORS
- PARKS AND BOULEVARDS
- SCHOOL GROUNDS
- PRIORITY STREETS
- INITIAL PROJECT AREA BOUNDARIES
- WEST SIDE

N
SCALE 0.5 1 2 MILES

INTEGRATING COMMUNITY INTEREST



FRAMEWORK FOR CONCENTRATED GREEN INFRASTRUCTURE

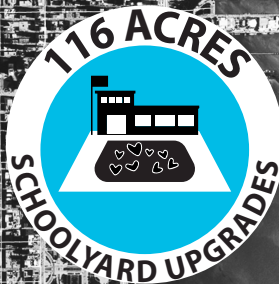
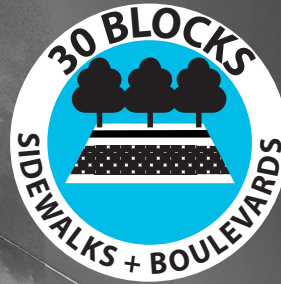
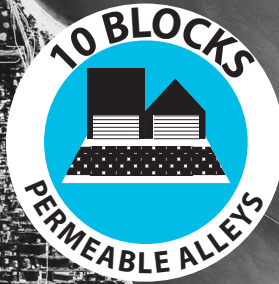


AREAS FOR CONCENTRATED GREEN INFRASTRUCTURE

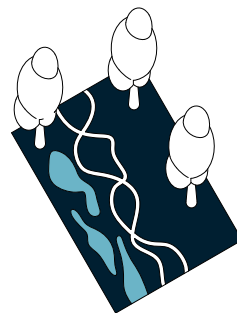
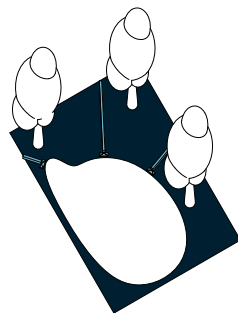
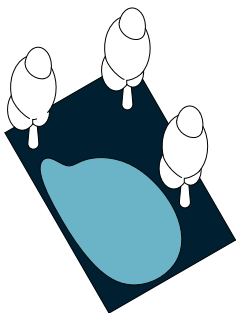
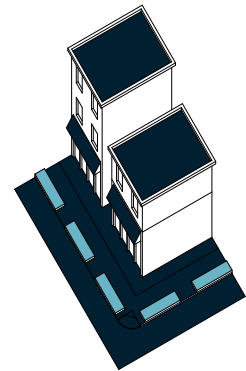
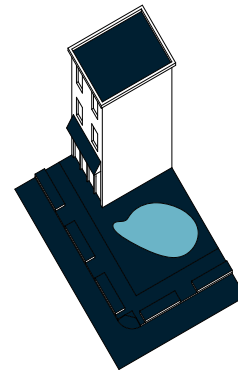
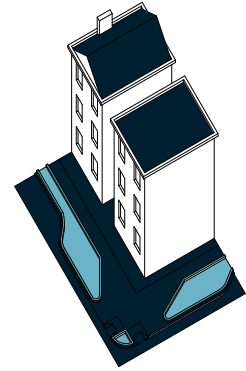
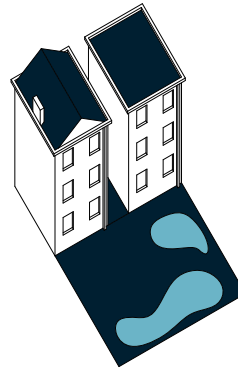
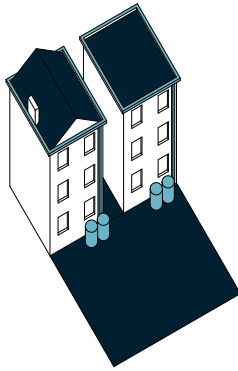
- INDUSTRIAL
- PARKS AND BOULEVARDS
- PUBLIC FACILITIES
- RESIDENTIAL
- COMPLETE STREETS + GREEN ALLEYS + TREE PLANTING
- VACANT COMMERCIAL LOTS
- SCHOOL GROUNDS
- DEPT. OF HOUSING PROJECTS
- PROJECT AREAS
- WEST SIDE

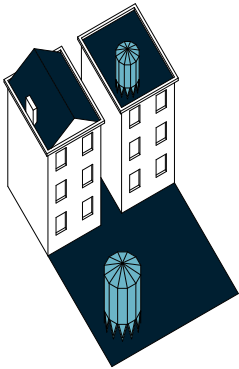
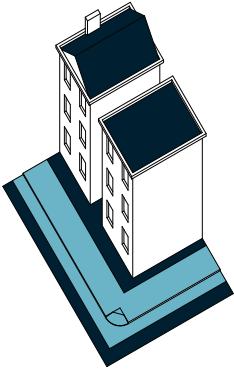
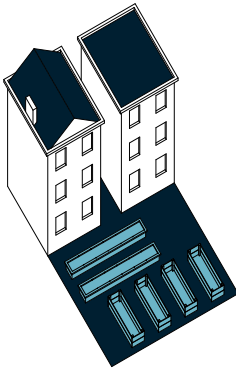
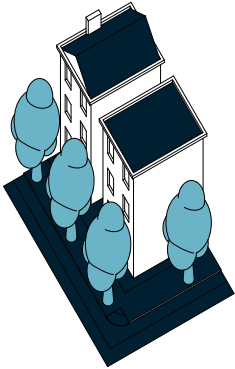
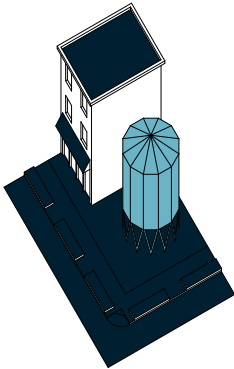
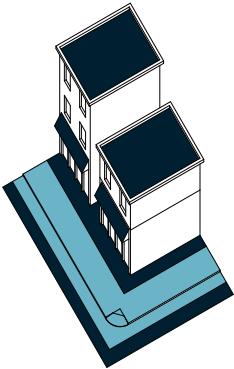
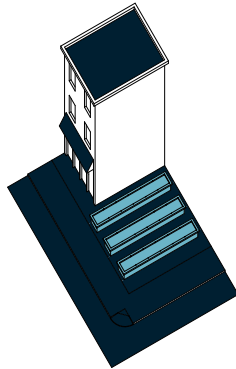
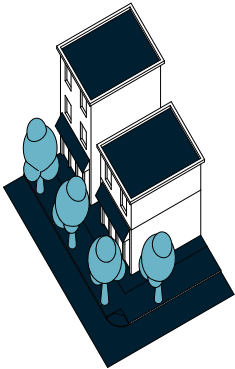
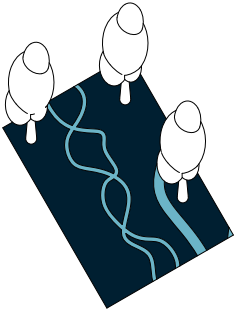
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SCALE 0.5 1 2 MILES

FRAMEWORK FOR CONCENTRATED GREEN INFRASTRUCTURE

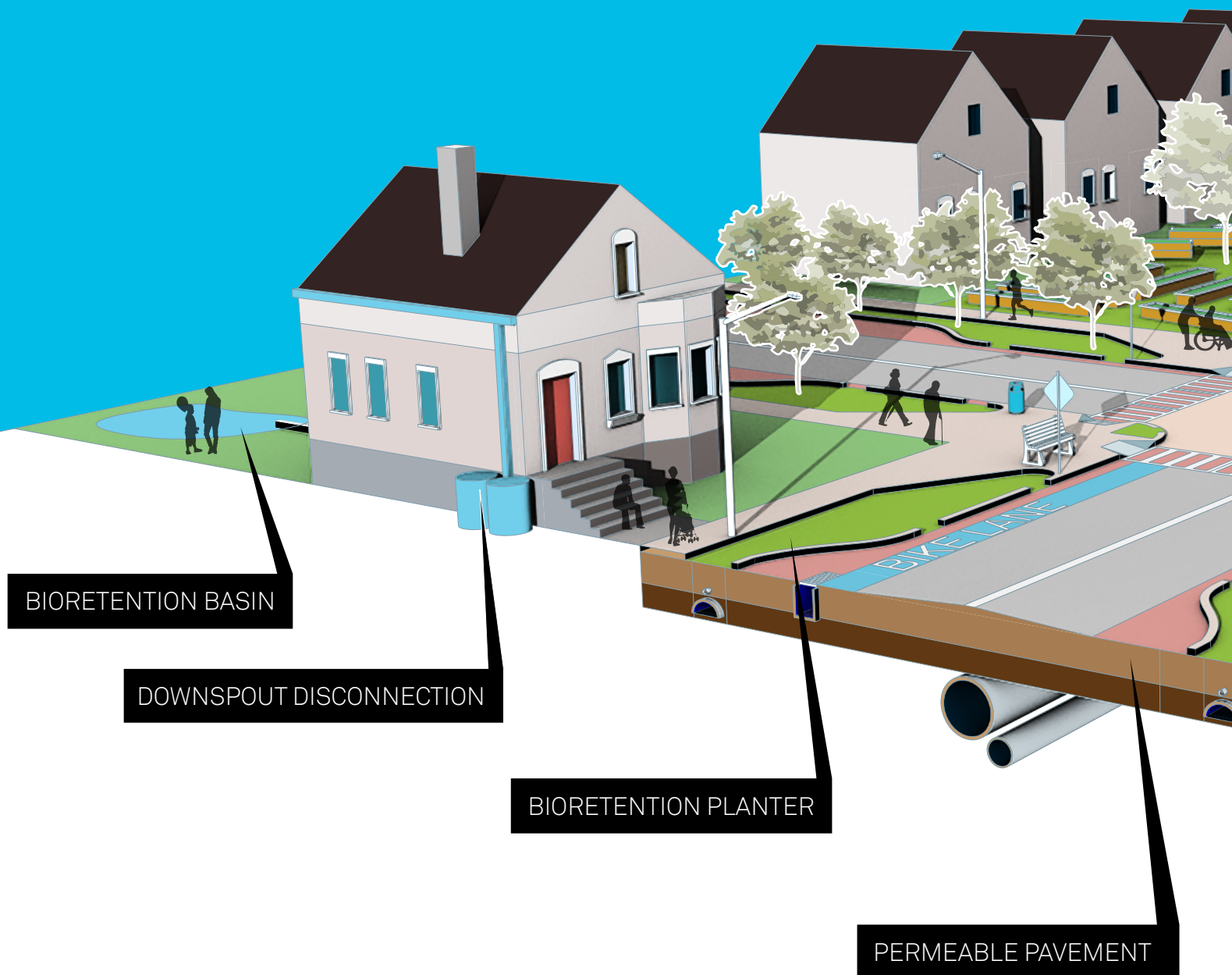


| <div>NEIGHBORHOODS</div> <div>COMMERCIAL + INDUSTRIAL CORRIDORS</div> <div>PARKS + BOULEVARDS</div> | | | | |
|-----------------------------------------------------------------------------------------------------|----------------------------|------------------------------------|-------------------------------|------------------------------------------------|
| | <div>DETENTION BASIN</div> | <div>DOWNSPOUT DISCONNECTION</div> | <div>BIORETENTION BASIN</div> | <div>FLOW-THROUGH PLANTER (BIORETENTION)</div> |



| | | | | |
|---------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| NEIGHBORHOODS |  |  |  |  |
| |  |  |  |  |
| | |  | | |
| | RAINWATER HARVESTING | PERMEABLE PAVEMENT | URBAN AGRICULTURE | STREET TREE PLANTING |

GREEN INFRASTRUCTURE CO-BENEFITS IN THE NEIGHBORHOODS



GREEN INFRASTRUCTURE

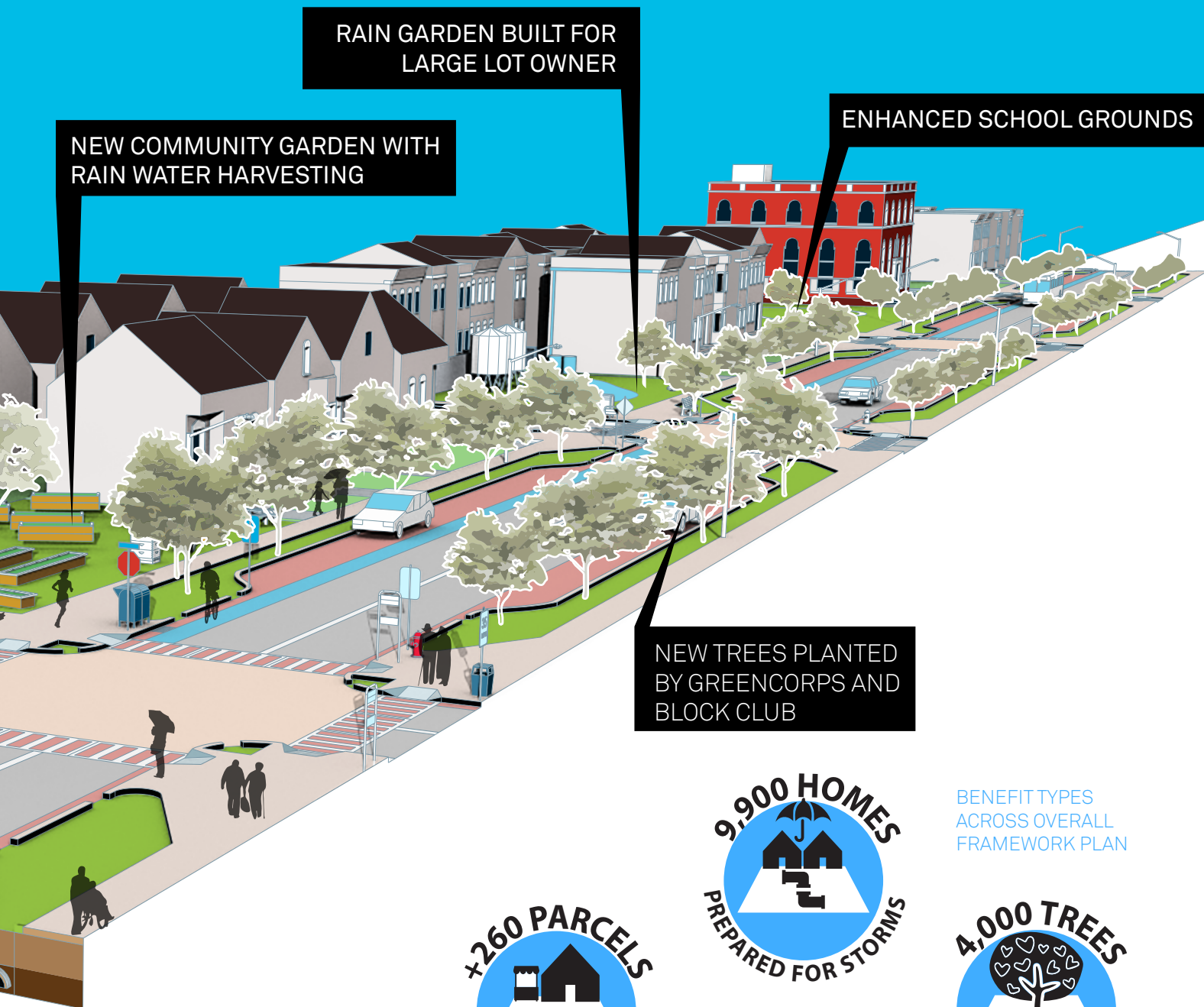
Reduce private property damage from flooding

TREE PLANTING

Increase residential property values

REDESIGN STREETS

Reduce traffic accidents



+260 PARCELS
VACANT LOT MAKE-OVERS

9,900 HOMES
PREPARED FOR STORMS

4,000 TREES

116 ACRES
SCHOOLYARD UPGRADES

BENEFIT TYPES
ACROSS OVERALL
FRAMEWORK PLAN

INCREASE GREEN SPACE

Improved living environment

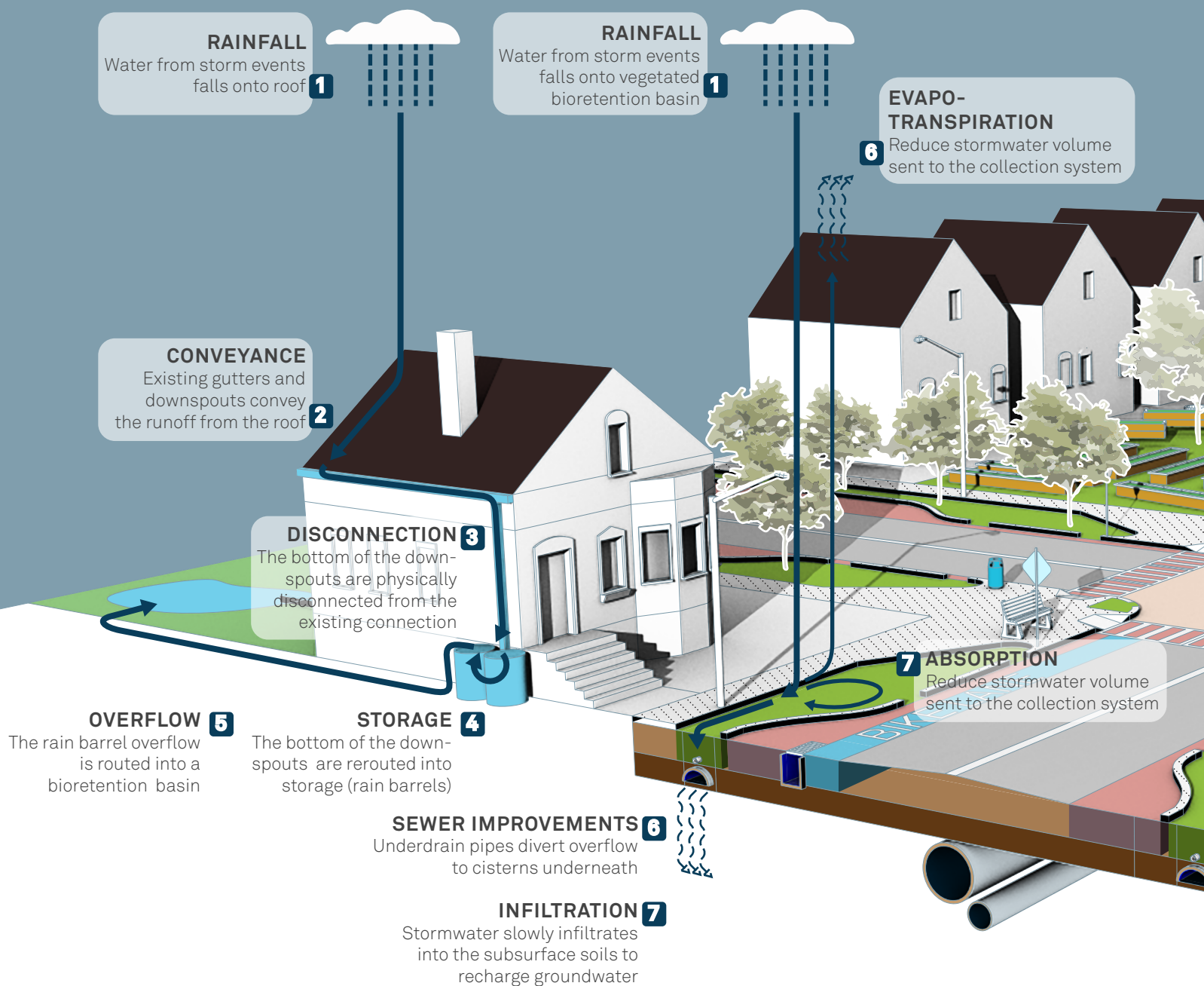
JOB CREATION

Provide Greencorps jobs and
workforce development




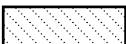
NEW TREES

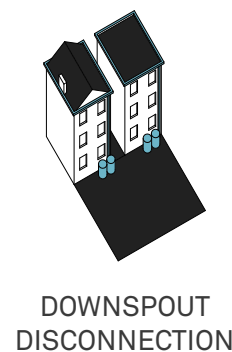
Absorb pollutants, reduce
CO2 and remove particulates

GREEN INFRASTRUCTURE PERFORMANCE IN THE NEIGHBORHOODS



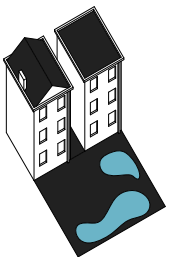
KEY

| | |
|-------------------------------------------------------------------------------------|------------------------|
|  | IMPERVIOUS SURFACE |
|  | PERMEABLE PAVINGS |
|  | PERMEABLE INTERSECTION |
|  | PERMEABLE SURFACE |

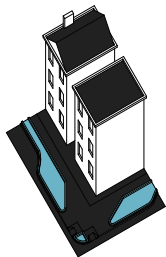




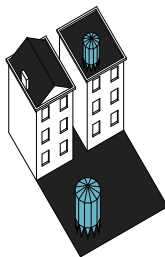
NEIGHBORHOOD TOOLS



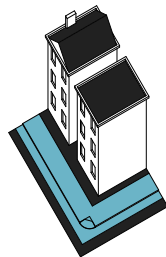
BIORETENTION
BASIN



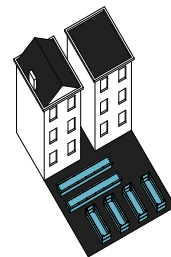
FLOW-THROUGH
PLANTER
(BIORETENTION)



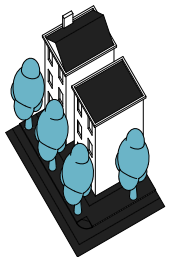
RAINWATER
HARVESTING



PERMEABLE
PAVEMENT



URBAN
AGRICULTURE



STREET TREE
PLANTING

NEIGHBORHOODS EXAMPLE - BEFORE



NEIGHBORHOODS EXAMPLE - AFTER





GREEN INFRASTRUCTURE CO-BENEFITS IN THE COMMERCIAL + INDUSTRIAL CORRIDORS

OUTSIDE DINING AREA WITH RAIN GARDEN

EMPLOYEE BREAK AREA WITH RAIN GARDEN

RAINWATER HARVESTING

BIORETENTION BASIN

BIKE LANE

PERMEABLE PAVEMENT

RETAIL SALES

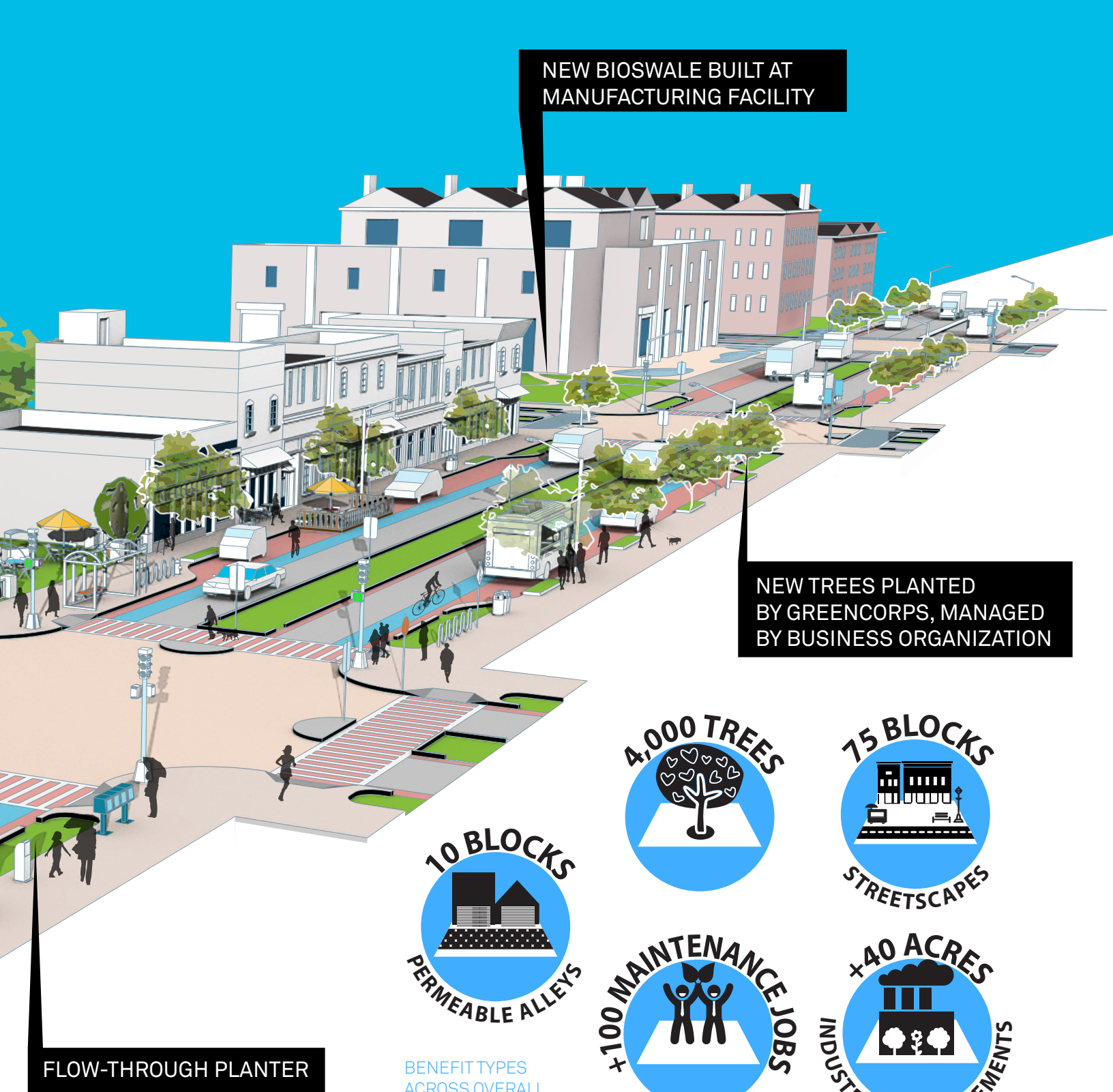
Revitalize local shopping district via landscaping

PROJECT CONSTRUCTION

Generate construction and engineering jobs

NEW BIKE LANES

Reduce number of accidents and car crashes with decreased automobile use



NEW BIOSWALE BUILT AT
MANUFACTURING FACILITY

NEW TREES PLANTED
BY GREENCORPS, MANAGED
BY BUSINESS ORGANIZATION

FLOW-THROUGH PLANTER

10 BLOCKS
PERMEABLE ALLEYS

4,000 TREES

75 BLOCKS
STREETSCAPES

+100 MAINTENANCE JOBS
GREENCORPS

+40 ACRES
INDUSTRIAL IMPROVEMENTS

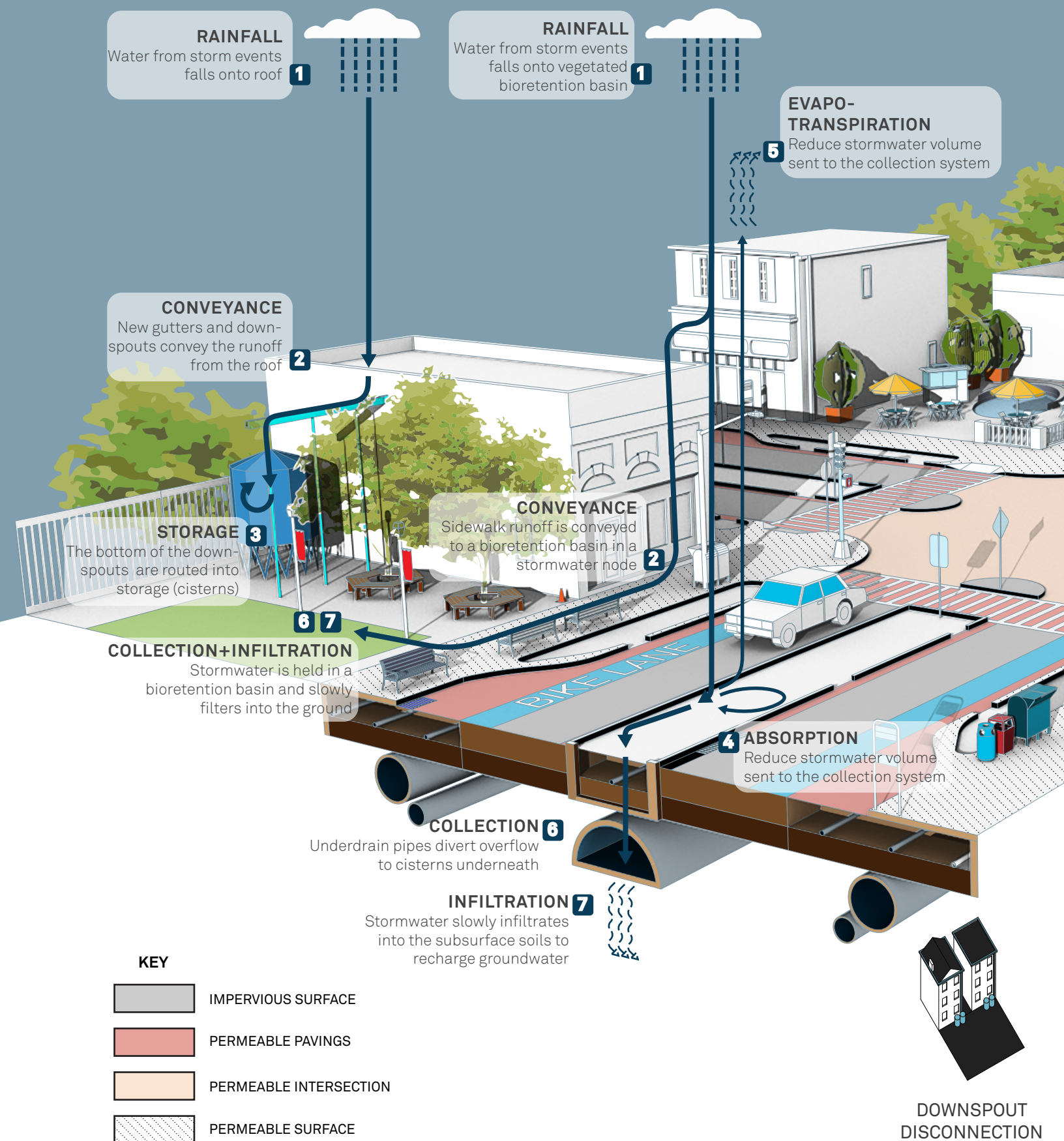
BENEFIT TYPES
ACROSS OVERALL
FRAMEWORK PLAN

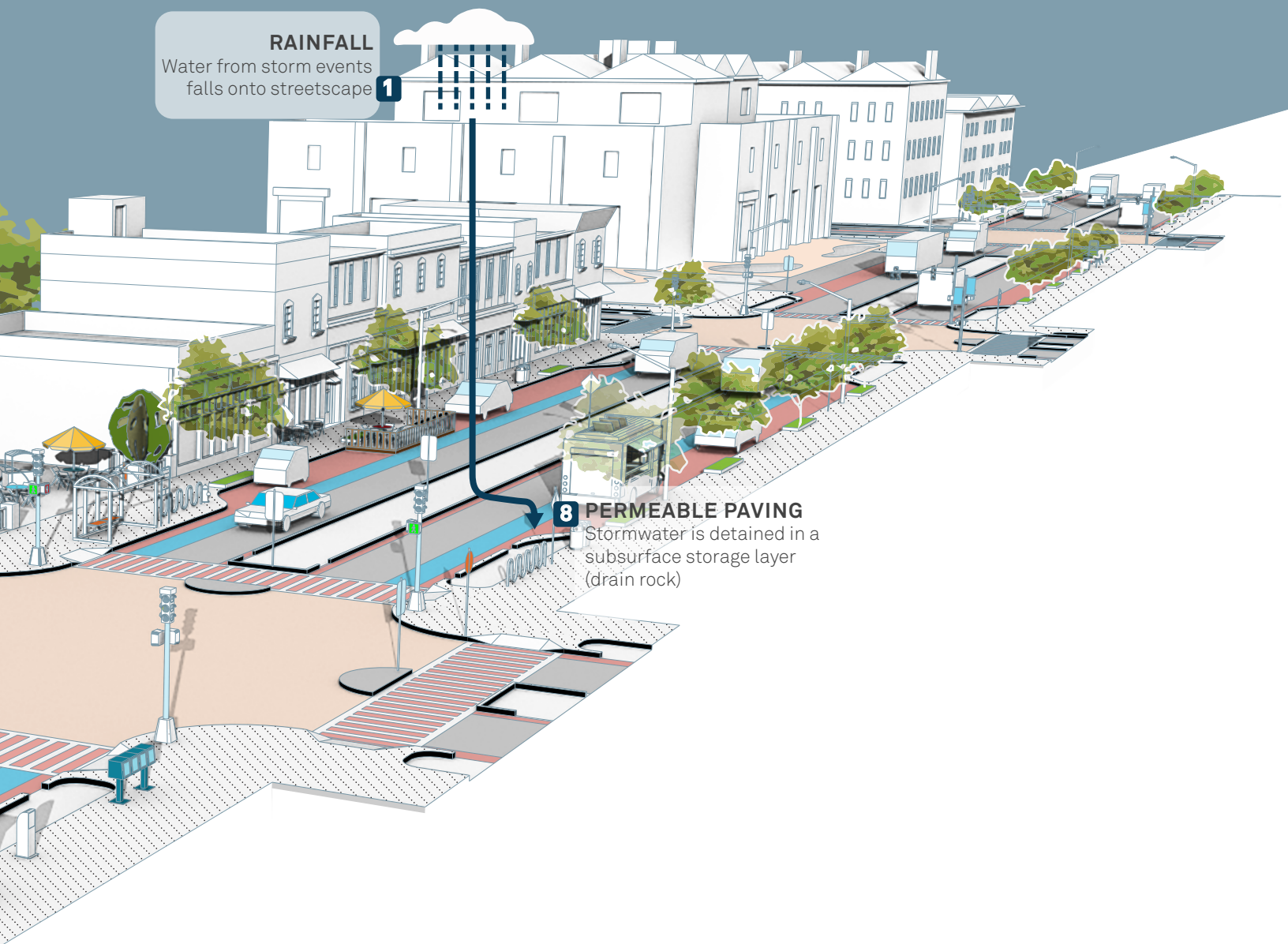
**GREEN
INFRASTRUCTURE**
Improve neighborhood safety

**RAINWATER
HARVESTING**
Offset water purchases

NEW TREES
Shade nearby buildings
to reduce heating and
cooling costs

GREEN INFRASTRUCTURE PERFORMANCE IN THE COMMERCIAL & INDUSTRIAL CORRIDORS

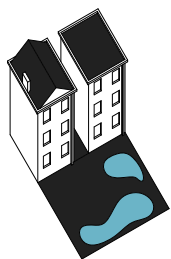




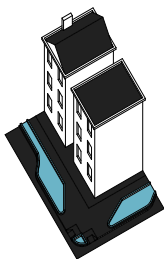
RAINFALL
Water from storm events falls onto streetscape **1**

8 PERMEABLE PAVING
Stormwater is detained in a subsurface storage layer (drain rock)

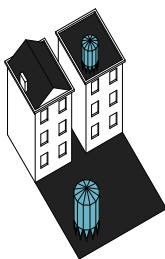
COMMERCIAL + INDUSTRIAL CORRIDORS TOOLS



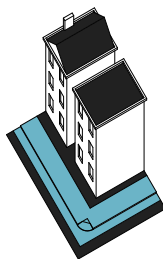
BIORETENTION BASIN



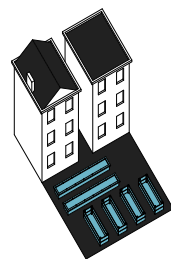
FLOW-THROUGH PLANTER (BIORETENTION)



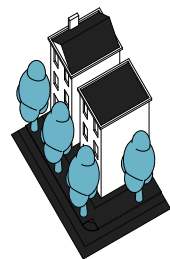
RAINWATER HARVESTING



PERMEABLE PAVEMENT



URBAN AGRICULTURE



STREET TREE PLANTING

COMMERCIAL + INDUSTRIAL CORRIDORS
EXAMPLE - BEFORE



COMMERCIAL + INDUSTRIAL CORRIDORS
EXAMPLE - AFTER

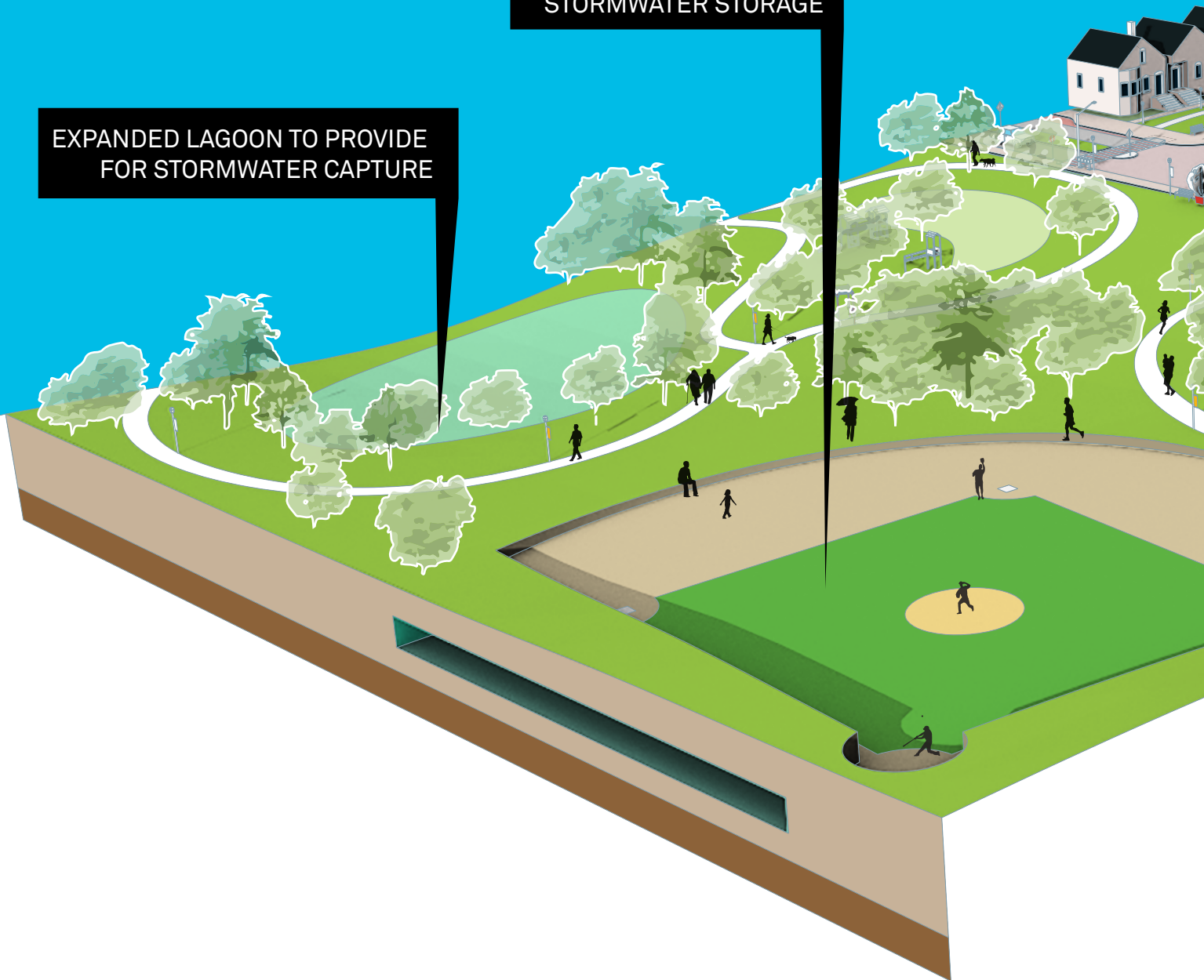




GREEN INFRASTRUCTURE CO-BENEFITS IN
THE PARKS + BOULEVARDS

RENOVATED BALLFIELD
WITH UNDERGROUND
STORMWATER STORAGE

EXPANDED LAGOON TO PROVIDE
FOR STORMWATER CAPTURE



PROJECT OPERATIONS

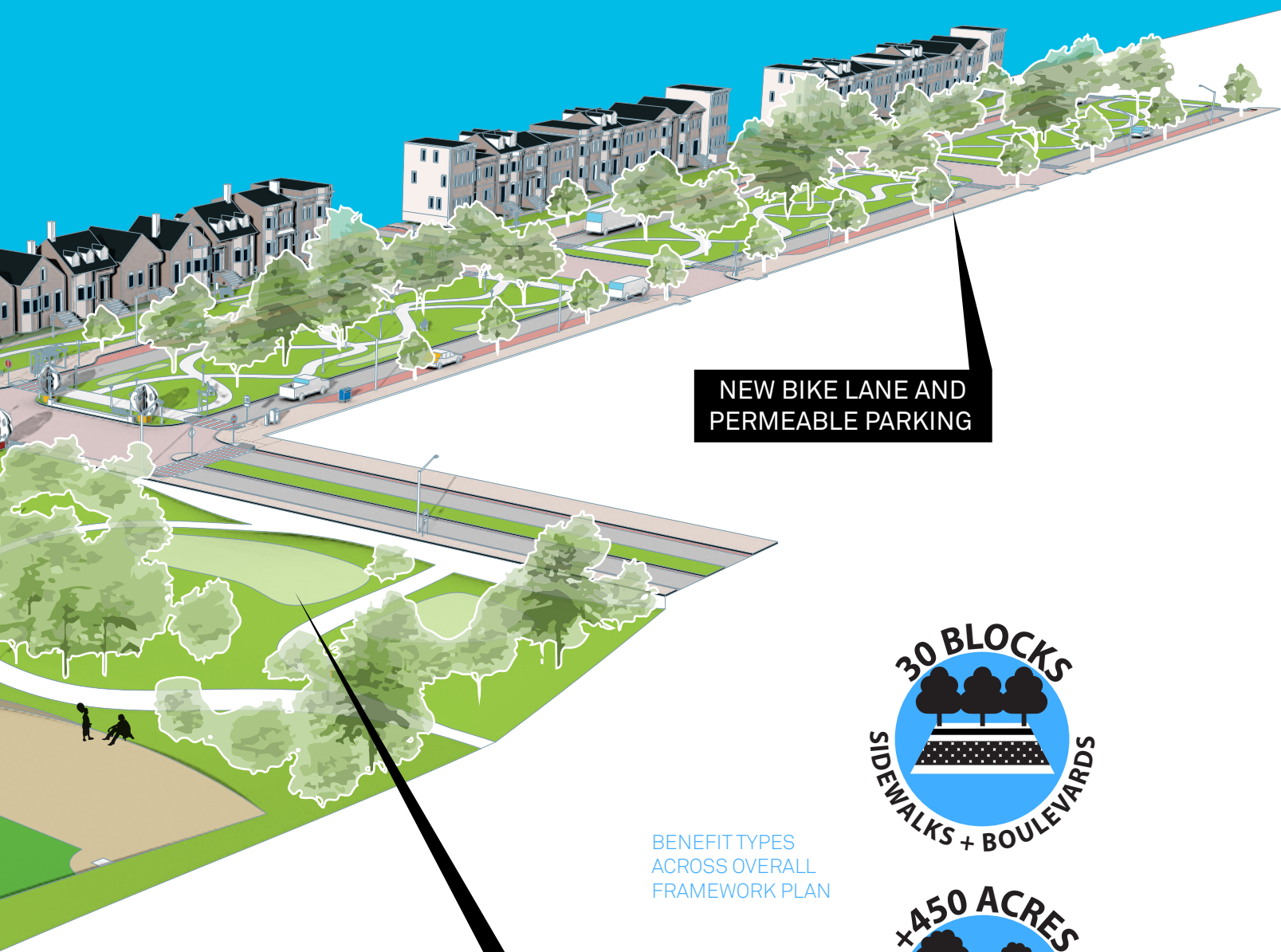
Generate maintenance jobs

**BIKE LANES AND
OPEN SPACE**

Increase recreation
opportunities and improve
health and mobility

**GREEN AND
OPEN SPACES**

Reduce asthma cases and
lower treatment costs for
diabetes



NEW BIKE LANE AND
PERMEABLE PARKING

LOCAL PARK EDGE ENHANCED
WITH BIORETENTION BASIN

BENEFIT TYPES
ACROSS OVERALL
FRAMEWORK PLAN

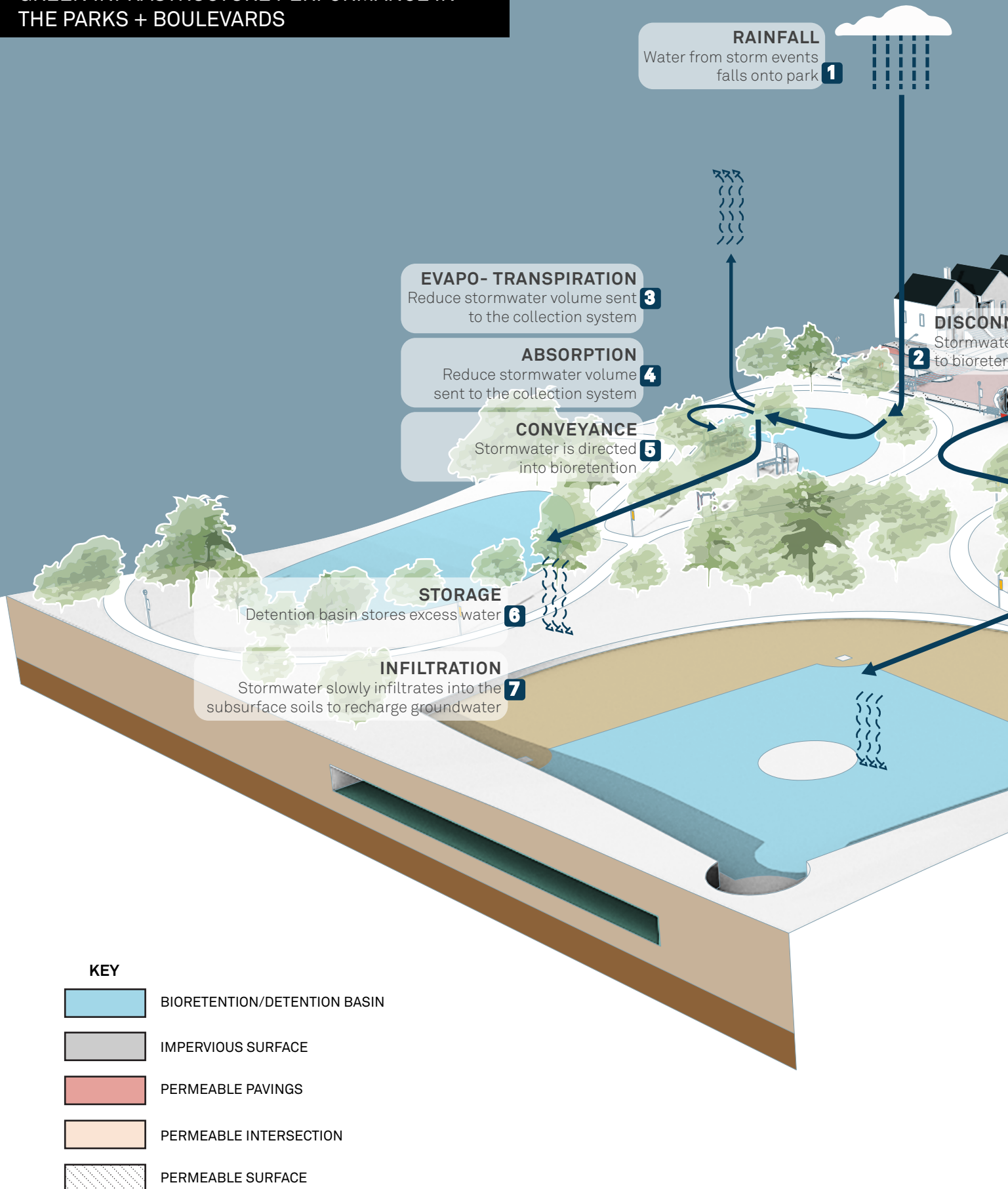


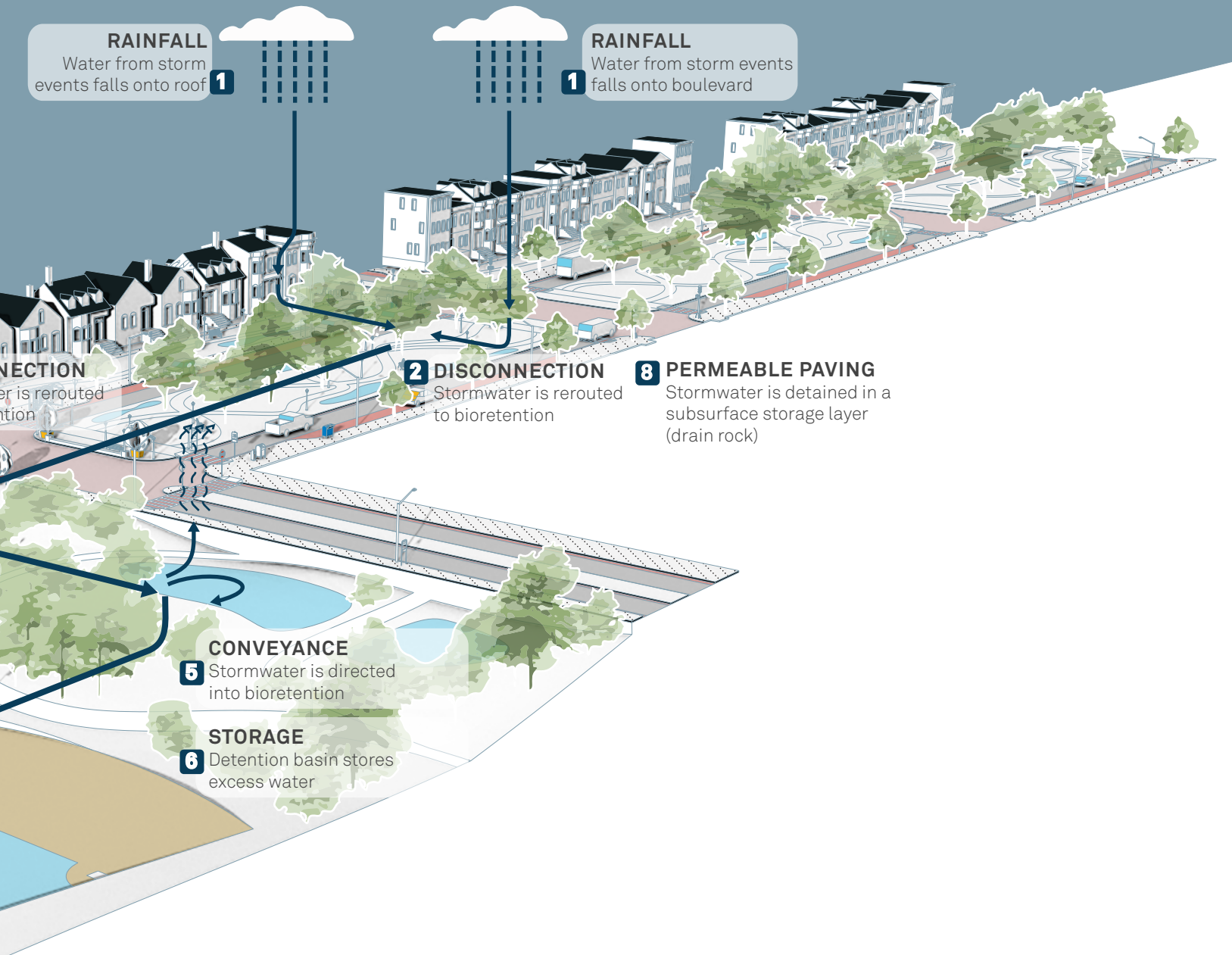
**GREEN
INFRASTRUCTURE**
Reduce stormwater runoff
and nutrient pollution

**OPEN SPACE AND
NEW HABITAT**
Improve ecosystem and
increase biodiversity

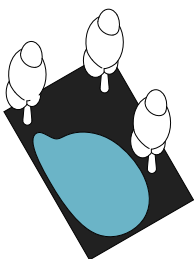
NEW TREES
Reduce urban heat-island
effects

GREEN INFRASTRUCTURE PERFORMANCE IN THE PARKS + BOULEVARDS

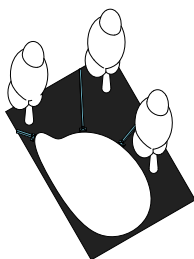




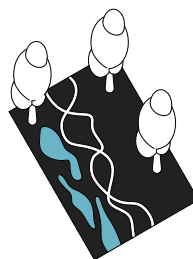
PARKS & BOULEVARDS TOOLS



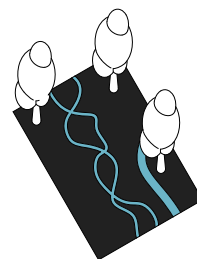
DETENTION
BASIN



DOWNSPOUT
DISCONNECTION



BIORETENTION
BASIN



PERMEABLE
PAVEMENT

PARKS + BOULEVARDS EXAMPLE - BEFORE



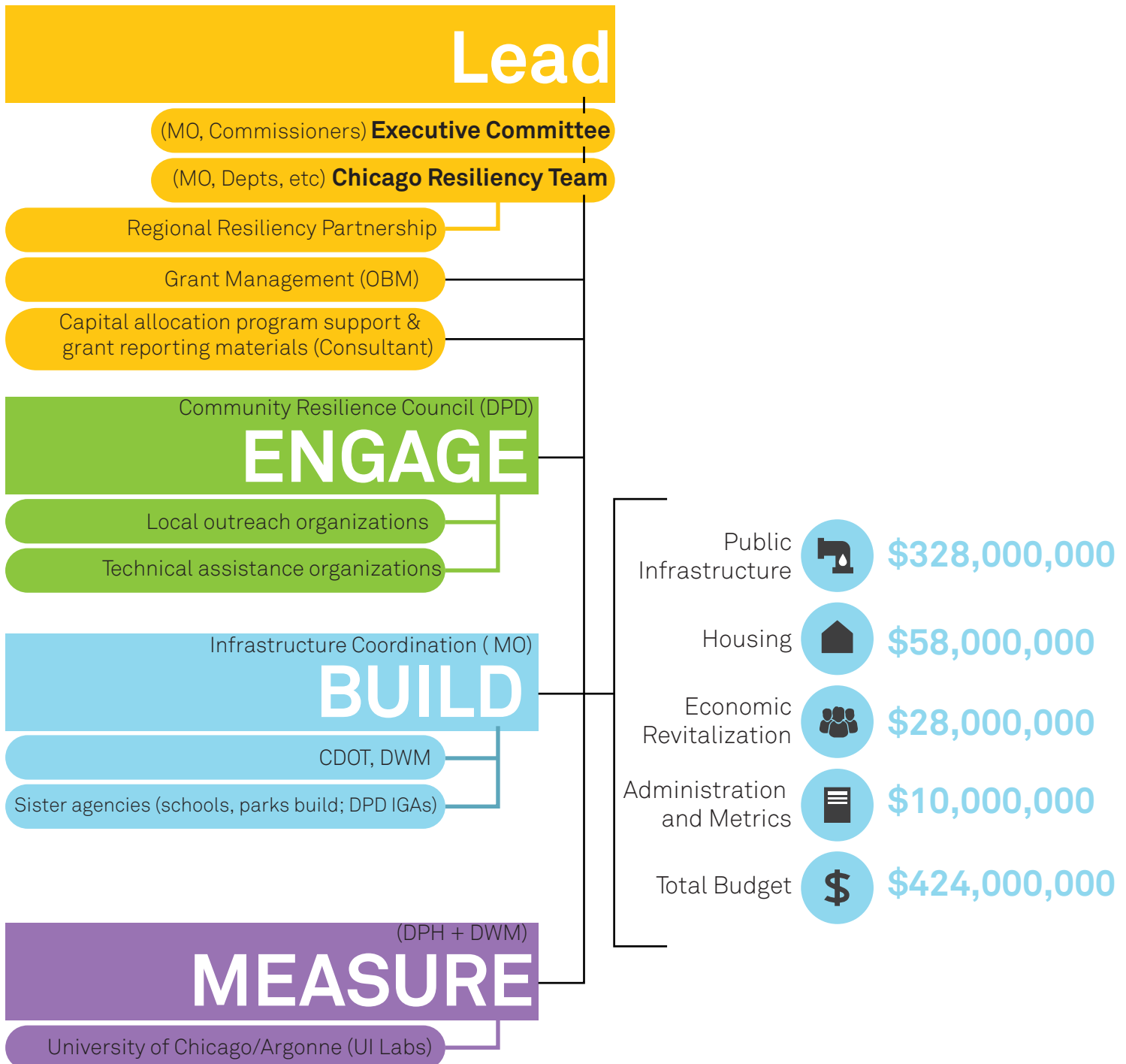
PARKS + BOULEVARDS EXAMPLE - AFTER





IMPLEMENTATION

STAKEHOLDERS / ORGANIZATIONS + FUNDING + SCHEDULE



STAKEHOLDER / ORGANIZATION KEY

City of Chicago Mayor's Office (MO)
 City of Chicago Office of Budget Management (OBM)
 City of Chicago Department of Planning and Development (DPD)
 Chicago Department of Transportation (CDOT)

Chicago Department of Water Management (DWM)
 Chicago Department of Public Health (DPH)
 Intergovernmental Agreement (IGA)

IMPLEMENTATION

STAKEHOLDERS / ORGANIZATIONS + FUNDING + SCHEDULE

2015 2016 2017 2018 2019 2020

Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4

LEAD

Executive Committee Meetings

Chicago Resiliency Team Meetings

Federal Award + Funding Alignment

ENGAGE

Community Resilience Council

Little Village + North Lawndale Plans

Street + Park-Specific Task Forces

Climate Smart Neighborhood Tool

BUILD

Contracting

Public Infrastructure

Housing

Economic Revitalization

MEASURE

Pre-performance Phase

Check-in + Reporting